MARINE CORPS
WARFIGHTING LABORATORY

ADVANCED LIGHT STRIKE VEHICLE

fact sheet

The purpose of the **Advanced Strike Light Vehicle (ALSV)** program is to demonstrate that it is possible to design and build a rugged, high performance, high mobility combat vehicle that meets the operational requirements of the infantry and reconnaissance communities, while retaining the ability to be internally transported aboard the MV-22 aircraft.

Background:
The specific Marine Corps mission requirement driving the ALSV design is the need for a motorized, offensive strike platform transportable inside the MV-22 Osprey. Commercial-off-the-shelf vehicles that are both mission effective and capable of MV-22 internal transportation do not currently exist. Therefore, the greatest challenge for the ALSV's designers is the overarching requirement that the vehicle fully comply with the rigid size/weight limitations required for MV-22's internal transportability while simultaneously meeting the operational performance requirements of the infantry and reconnaissance communities.

A team comprised of subject matter experts from within Naval Aviation and the Marine Corps' infantry/reconnaissance communities have teamed up with design experts and partnered commercial entities to design, from the ground up, the optimum MV-22 internally transportable light strike vehicle.

This program has used, and will continue to use, the most advanced vehicle prototyping tools available to design and build the ALSV. The program began with a trade-off study, which was then followed by the creation of a computer-generated model of the prototype vehicle. This computer-generated model, with accompanying engineering support data, was presented to the Integrated Program Team at a Critical Design Review (CDR) on 1 April 2004.

The computer-generated design was first approved by the infantry and reconnaissance advocates at the CDR and then by the Commanding General, Marine Corps Warfighting Laboratory (MCWL). The ALSV program is now in the build phase, at the completion of which two ALSV Generation-1 prototypes will be fielded for performance testing in a wide range of environments and mission scenarios.

Specifications:
1. MV-22 Internally Transportable (design must be capable of aircraft certification).
2. Capable of mounting existing heavy machineguns (Mk-19 and M-2).
3. Capable of seating four personnel.
4. Incorporates the latest mature technology into suspension and drivetrain.

5. Diesel engine.
6. 3 speed automatic transmission.
7. Overall Width is 60"
8. Overall Length is 182"
9. Overall Height is 60.5"
10. Curb weight is 3566 lbs.
11. Payload is 3054 lbs.
12. Range is 300+ miles.
13. Trailer Towing Capacity: 1500 lbs (un-braked trailer); or up to 4000 lbs (braked trailer), provided combined weight of vehicle and trailer does not exceed 8000 lbs.

Deliverable Products:
Two working ALSV Generation-1 prototypes. Option exists for design and build of a single Generation-2 prototype.

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